Lessons from Interspecies Mammalian Chimeras.

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Funding Grants: Generation of functional cells and organs from iPSCs

Public Summary:
The review highlights the history of interspecies mammalian chimeras and their applications in bioscience. We discuss generation of solid organs from iPSCs via a process called interspecies organogenesis and describe the state of this field.

Scientific Abstract:
As chimeras transform from beasts of Greek mythology into tools of contemporary bioscience, secrets of developmental biology and evolutionary divergence are being revealed. Recent advances in stem cell biology and interspecies chimerism have generated new models with extensive basic and translational applications, including generation of transplantable, patient-specific organs.